

REMARKS/ARGUMENTS

Summary

Claims 1-21 are pending in this application.

The Examiner rejected claims 1, 3, 4, 9, 10, and 19 under 35 U.S.C. §102(e) as being anticipated by Nagata (U.S. Patent 6,970,096). The Examiner rejected claims 2, 5-8, 11-17, and 21 under 35 U.S.C. §103(a) as being unpatentable over Nagata in view of Borgstahl (U.S. Patent 5,909,183). The Examiner rejected claims 18 and 20 under 35 U.S.C. §103(a) as being unpatentable over Nagata and Borgstahl in view of Young (U.S. Patent 5,749,547).

Applicants have amended independent claim 1 to further clarify aspects of the claimed invention. Claims 2-5, 7, and 11 have been amended to conform with claim 1. Support for these amendments can be found, for example, at page 2, line 23 to page 3, line 9, and at page 5, line 23 to page 6, line 29 of the specification. Claims 13, 14, and 21 have been amended for clerical or typographical reasons. No new matter has been added. The Examiner's rejections are respectfully traversed.

Applicants' Claims

Applicants' independent claims 1, 13, 14, 19, and 21 are directed to systems and methods for identifying and controlling one of a plurality of devices in a model vehicle system. In particular, applicants' claimed approach enables the user to selectively poll a device (e.g., a model train) for its identification information by physically positioning a remote control near the device. The received identification information is then used by the remote control in a command targeted to the device. Applicants' approach, for example, enables the user to merely position the remote control near any of a plurality of model trains in a system and immediately start issuing commands targeted to that model train. Applicants' approach is advantageous over the prior art at least because it does not require the user to visually identify a device and then select a corresponding option on the remote in order to start issuing commands targeted to the device. Accordingly, applicants' novel approach advantageously enables the user to quickly and intuitively transition from the control of one device to another in a model vehicle system.

The Rejection Based on Nagata

The Examiner rejected claims 1, 3, 4, 9, 10, and 19 under 35 U.S.C. §102(e) as being anticipated by Nagata.

Applicants submit, however, that Nagata fails to show or suggest the method of “transmitting between said first device and said remote, wherein said remote is only capable of receiving an ID for said first device when said remote is placed within a narrow spatial field emanating from said first device”, as set forth by independent claim 1.

Nagata, in relevant part, refers to a system that enables the targeted control of one drive from a multitude of drives by addressing commands with the identification information for the targeted drive (FIG. 1 and col. 3, lines 31-44). As such, the user of the Nagata system may select a particular drive to control by inputting its identification information on the remote control (i.e., by inputting the transmitter ID and car number using switches 29 and 30) and transmitting a command containing the identification information to be acted upon by the targeted drive and ignored by other drives (FIG. 2 and col. 4, lines 42-54). However, nowhere in Nagata is it shown or suggested that its remote control receives identification information for a device when the remote control is placed within a narrow spatial field emanating from the device (e.g., to receive a signal containing the ID). Rather, Nagata utilizes a completely different approach, one in which the identification information for a device to be controlled is manually input into the remote by the user.

Accordingly, applicants submit that independent claim 1 is patentable. Claims 2-12 are patentable at least because they depend from patentable claim 1.

Applicants further submit that Nagata fails to show or suggest “a receiver mounted in said remote control device, for receiving a transmission from a first model vehicle . . . with an ID of said first model vehicle” and a “processor [that is] configured to send a command to said first model vehicle . . . using said ID received by said transmission”, as set forth by independent claim 19.

As previously discussed, Nagata is directed to the manual inputting into a remote control of identification information for a targeted drive, such identification information then being transmitted from the remote control as part of the command signal. Nowhere does Nagata show or suggest that its remote control device receives a transmission from a drive with the identification information for the drive. It follows then that Nagata fails to even contemplate applicants' approach for using the ID received by such a transmission in a command sent by the remote control to the device.

Accordingly, applicants submit that independent claim 19 is patentable. Claim 20 is patentable at least because it depends from patentable claim 19.

The Rejection Based on Nagata and Borgstahl

The Examiner rejected claims 2, 5-8, 11-17, and 21 under 35 U.S.C. §103(a) as being unpatentable over Nagata in view of Borgstahl.

Borgstahl refers to a personal area network in which appliances may be programmed or controlled using a controller. Low power wireless communication links create a detection zone around each of a multitude of peers, which may be an appliance or a controller. When the detection zone of a controller peer overlaps with that of an appliance peer, the two peers establish a communications link that allows the controller to program or otherwise control the functions of the appliance. (See FIGS. 1 and 6, col. 4, line 57 to col. 5, line 29, and col. 7, line 62 to col. 8, line 4).

Absent the combination with Borgstahl, it is clear that Nagata alone is insufficient to show all the features of applicants' independent claims 13, 14, and 21. In particular, Nagata fails to show or suggest the method of "periodically transmitting from a first model train an ID for said first model train in a limited field infrared transmission" and "positioning a remote control device near said first model train so that only a transmission from said first model train is received by an infrared receiver in said remote control device", as set forth by independent claim 13. Similarly, Nagata fails to show or suggest "a transmitter mounted in said vehicle for directing a transmission that can be received by said remote control unit" and "means for

limiting said transmission so that only a narrow transmission from a single vehicle is received by said remote control unit when positioned in a field of said transmission”, as set forth by independent claim 14 and echoed in claim 21.

In view of the foregoing, applicants submit that the Office Action has failed to establish a *prima facie* case of obviousness because it fails to provide a proper motivation or suggestion to combine Nagata with Borgstahl. In particular, applicants submit that i) the proposed combination would require modifications to Nagata that would impermissibly alter its principle of operation, and ii) the motivations proffered in the Office Action are insufficient.

Nagata's system enables a user to remote control a targeted device amongst a multitude of devices by manually selecting the targeted device on a remote control. The identification information for the targeted device is then included in the commands transmitted by the remote control, such that the targeted device responds only to commands having its identification information and not others. As such, the remote controlled devices of Nagata are limited as passive recipients of commands transmitted by the remote control. In direct contrast, applicants' approach sets forth model trains that actively transmit ID information to the remote control in a narrow transmission, so that the remote control must be physically placed within the field to receive the ID information for a particular train.

Therefore, in order to modify Nagata and reach applicants' claimed approach, not only must the Nagata drives be redesigned to accommodate signal transmitters, the Nagata remote control must be operated in an entirely different manner. That is, rather than merely pressing a button on the remote to select a drive to control, the remote itself must be physically moved within the field of a narrow transmission to receive the identification information needed to control the drive. This modification would entirely obliterate the operating principle of Nagata, namely that the user may control multiple drives by merely selecting the buttons corresponding to the drives on a remote control (Nagata, col. 1, lines 50-61). Such a drastic modification to the operating principle of a system is evidence that the references are insufficient to render obvious applicants' claims (MPEP 2143.02 (VI)).

Applicants further submit that the statement of motivation proffered in the Office Action is insufficient. The Office Action states:

[I]t would have been obvious to one of ordinary skill in the art at the time of the invention to have had a bi-directional link for programming the train of Nagata since this would [i)] expand the control capabilities for complex trains while [ii)] also requiring less memory and processing power in the actual train itself since more intelligence would be in the controller as suggested by Borgstahl. (Office Action, page 4, lines 7-11.)

Regarding the first proffered motivation, applicants submit that the Office Action is unclear as to how the addition of an ID transmitter on a model train would expand the control capabilities for complex trains. Applicants further note that there is no objective evidence to establish the basis for this claim, whether in the form of a citation to the references themselves or the general knowledge of the art. Regarding the second proffered motivation, applicants submit that the addition of an ID transmitter would actually increase the complexity of the model train, rather than decrease its complexity as is stated in the Office Action.

Applicants further note that the Office Action fails to provide any motivation or suggestion as to why one of skill in the art would modify Nagata to achieve applicants' approach for limiting the ID transmission so that only a narrow transmission from a single vehicle is received in the field of the transmission. Applicants submit that the alleged motivations proffered in the Office Action do not address this feature of applicants' claims, because a bi-directional link need not be limited in the manner of applicants' claims. Rather, without a proper motivation, one of skill in the art would not see any benefit in practicing applicants' approach.

Therefore, applicants submit that the Office Action has failed to provide a proper motivation or suggestion to combine Nagata with Borgstahl. In the absence of such a motivation, any combination of references to achieve applicants' invention is an impermissible hindsight reconstruction guided by applicants' disclosure. It should be noted that the fact that references can be combined or that the combination is within the capabilities of one of ordinary

skill in the art is not sufficient to establish a case of *prima facie* obviousness without a proper motivation to combine (MPEP 2143.01 (III, IV)).

Accordingly, applicants submit that independent claims 13, 14, and 21 are patentable. Claims 15-18 are patentable at least because they depend from patentable claim 14.

The Rejection Based on Nagata, Borgstahl, and Young

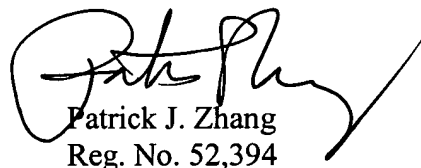
The Examiner rejected claims 18 and 20 under 35 U.S.C. §103(a) as being unpatentable over Nagata and Borgstahl in view of Young. Applicants submit that claims 18 and 20 are patentable at least because they depend from patentable claims 14 and 19, respectively.

CONCLUSION

In view of the foregoing, applicants submit that this application is in condition for allowance, and a formal notification to that effect at an early date is requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 273-8305 (direct dial).

Respectfully submitted,


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